

ABSTRACT OF THE DISCLOSURE

An image signal is input from an image input unit and is divided into different spatial frequency bands by applying a discrete wavelet transform thereto using a
5 discrete wavelet transformation unit. On the basis of values of spatial frequency components, a region-of-interest extracts a region of interest by obtaining a distribution of motion vectors in the input image. A quantization unit applies quantization processing to the
10 extracted region of interest and different quantization processing to other regions, and an encoder encodes the quantized image signal. Alternatively, motion of an image contained in the input image may be detected and the region of interest may be obtained based upon motion
15 of this image.